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**Subject:** OCSPP Clips for December 8, 2020

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## **PFAS Litigation ‘Second Wave’ Ahead if Biden Delivers New Rules**

Ellen M. Gilmer & Sylvia Carignan, Bloomberg Law

[https://news.bloomberglaw.com/environment-and-energy/pfas-litigation-second-wave-ahead-if-biden-delivers-new-rules?usertype=External&bwid=00000176-1f3a-d6d5-a976-df3bda7e0001&qid=7023561&cti=FGOV&uc=1320000080&et=NEWSLETTER&emc=neve\\_nl%3A2&source=newsletter&item=headline&region=featured-story&access-ticket=eyJjdHh0IjoITkVWRSIsImlkIjoIMDAwMDAxNzYtMwYzYS1kNmQ1LWE5NzYtZGYzYmRhN2UwMDAxliwic2InIjoibU96M08vNmQ0eWdsWHRCYmw5eTZrZEk1OUUpVPSIsInRpbWUjOillxNjA3NDI5MDEyIiwidXVpZCI6Ik45ejBWdUJCdHFEHhoazNBME5TV0E9PXJ2K3hYUDhkSUtXTy94WVhUMU0vRkE9PSIsInYiOilxIn0%3D](https://news.bloomberglaw.com/environment-and-energy/pfas-litigation-second-wave-ahead-if-biden-delivers-new-rules?usertype=External&bwid=00000176-1f3a-d6d5-a976-df3bda7e0001&qid=7023561&cti=FGOV&uc=1320000080&et=NEWSLETTER&emc=neve_nl%3A2&source=newsletter&item=headline&region=featured-story&access-ticket=eyJjdHh0IjoITkVWRSIsImlkIjoIMDAwMDAxNzYtMwYzYS1kNmQ1LWE5NzYtZGYzYmRhN2UwMDAxliwic2InIjoibU96M08vNmQ0eWdsWHRCYmw5eTZrZEk1OUUpVPSIsInRpbWUjOillxNjA3NDI5MDEyIiwidXVpZCI6Ik45ejBWdUJCdHFEHhoazNBME5TV0E9PXJ2K3hYUDhkSUtXTy94WVhUMU0vRkE9PSIsInYiOilxIn0%3D)

Hundreds of lawsuits over ‘forever chemicals’ already pending

Biden campaigned pledged action under Superfund, water laws

The incoming Biden administration’s pledge to take quick action to address “forever chemicals” will have ripple effects in high-stakes lawsuits playing out across the country.

Per- and polyfluoroalkyl substances, or PFAS, are already feeding a fast-growing web of litigation among manufacturers, water utilities, states, and people affected by contamination, as some of the chemicals have been linked to cancer and other health problems.

The Environmental Protection Agency has taken some steps to address PFAS concerns under President Donald Trump, and it’s poised to make swifter progress under President-elect Joe Biden, who listed PFAS action as a priority in his campaign’s environmental justice plan.

Specifically, the Democrat has vowed to use the federal Superfund law and the Safe Drinking Water Act to tighten oversight of some types of PFAS—moves that will affect existing legal battles and drive new ones.

“We’re already in the thousands of PFAS lawsuits, but you may see another wave,” Atlanta-based King & Spalding LLP attorney Douglas A. Henderson said. The incoming administration’s anticipated regulatory updates will create “stronger hooks” for legal action on PFAS, he added.

‘Big Stick’ on Superfund

The Biden campaign’s commitment to declaring PFAS hazardous under Superfund law would create a liability web even wider than the one that already entangles dozens of manufacturers, suppliers, distributors, and users of the chemicals.

“Think of CERCLA as a big stick that you can beat people with,” Henderson said, referring to the Comprehensive Environmental Response, Compensation, and Liability Act, which governs Superfund cleanups.

If the EPA designates PFAS as hazardous under the law, the agency gets greater latitude to add sites to the National Priorities List, particularly those primarily contaminated with the chemicals, said Allison Rumsey, partner at Arnold & Porter Kaye Scholer LLP in Washington.

“That just gives them more tools in their toolbox,” she said. After listing a site, the EPA can order a potentially responsible party to pay for the cleanup.

Under Trump, the EPA has considered but not yet finalized a hazardous designation for the two most well-studied PFAS types: PFOA and PFOS. The Biden campaign has promised to follow through on that proposal, though it hasn’t specified which types of the chemicals it would address.

“That’s really going to spike litigation,” said John A. Sheehan, a lawyer at Cohen Milstein Sellers & Toll PLLC in Washington.

Clearer Liability

At the same time, the change could make PFAS liability more straightforward for water utilities and companies dealing with cleanups—providing a clear process for pulling in anyone who might be responsible for a site’s contamination and then divvying up the costs, Henderson said.

Without the designation, the EPA or another party attempting to compel cleanup must prove that the chemicals pose an “imminent or substantial danger to the public health or welfare.” That additional burden wouldn’t apply if the chemicals were designated hazardous, said Todd C. Fracassi, partner at Troutman Pepper Hamilton Sanders LLP in Detroit.

PFAS manufacturer 3M Co. is likely to be ensnared in legal fights over PFAS-focused Superfund cleanups, along with E.I. DuPont de Nemours & Co., Chemours Co., and other chemical companies, Height LLC analyst Josh Price said.

3M spokesman Sean Lynch said it’s premature for the company to comment on the prospect of a hazardous designation until the EPA publishes a proposed rule, and said “the same rigorous and scientific hazardous substance evaluation process applied to other substances should apply to PFOA and PFOS.”

DuPont and Chemours didn’t respond to requests for comment.

#### Cleanup Expenses

The president-elect’s pledge to set caps on PFAS in drinking water will also send a jolt through the litigation landscape, prompting new claims and narrowing some defensive arguments.

Biden’s campaign over the summer committed to setting enforceable limits for PFAS under the Safe Drinking Water Act, an action that would expand on the EPA’s current unenforceable health advisory levels of 70 parts per trillion for two types of the chemicals. The Trump administration has been working on a proposal for binding limits, but hasn’t finalized anything.

Setting the so-called maximum contaminant levels, or MCLs, under the law would require water utilities to make significant investments in filtration systems to target certain PFAS in their water supplies. And they’ll be looking for big chemical companies to cough up money for some of the costs, Cohen Milstein’s Sheehan said.

He added that many water utilities are already incurring PFAS cleanup expenses—either to meet the EPA’s existing unenforceable standards or to comply with strict state-level rules that are already in effect. Some have gone to court to try to get costs covered by 3M, DuPont, and other companies. Setting MCLs “adds more fuel to the fire,” he said, encouraging more utilities to attempt to defray cleanup costs by suing the companies responsible for the chemicals.

The costs are “no longer hypothetical” for water utilities if Biden follows through on his pledge, Height LLC’s Price said.

“The question becomes, who’s going to pay for it?” he said. “I would expect a second wave and even a third wave of litigation stemming from this.”

While some utilities will go after local industrial sources releasing PFAS into nearby waterways, many will opt to target 3M and other PFAS creators directly, alleging that those companies knew the chemicals’ risks before disseminating their products, Sheehan said.

3M supports enforceable limits for PFOA and PFOS in drinking water, the company’s spokesman said. DuPont and Chemours didn’t respond to requests for comment.

#### ‘Adds Validity’

Strict federal limits on certain types of PFAS in drinking water will not only feed new lawsuits; it will also affect how companies respond to new and ongoing enforcement actions, said Baker Donelson attorney Ralph A. DeMeo in Tallahassee, Fla., who represents Florida airports dealing with PFAS issues.

Companies facing enforcement actions at the state level can currently point to the EPA's "equivocation" on PFAS policies and the unenforceable nature of federal advisory guidelines to argue that state officials are overstepping by mandating compliance with numbers that aren't backed by a full rulemaking process or scientific analysis, DeMeo said. That isn't as compelling a defense if strict federal limits are finalized.

"We would still have that ability to make those arguments," he said, "but it's a little bit more of a challenge when that number has been subject to the stringent rulemaking requirements, and that becomes a standard."

Clear federal regulations will also fuel additional product liability cases focused on PFAS makers and users up and down the supply chain, Height's Price said. Many existing lawsuits have prompted legal and scientific debates about the chemicals' harm, but federal action "adds validity to plaintiffs' claims," he said.

"One thing that could cut through the murkiness here is having federal regulation," he said, "an MCL or CERCLA designation that this concentration is harmful to humans."

To see the latest updates on state-level PFAS regulations and legislation, check out Bloomberg Law's PFAS State Activity Tracker [here](#).

### **House members press for funding to bolster EPA PFAS work**

Inside EPA

<https://insideepa.com/daily-feed/house-members-press-funding-bolster-epa-pfas-work>

A bipartisan group of 58 House lawmakers is urging the House and Senate appropriations committee leaders to back spending measures aimed at addressing environmental issues over per- and polyfluoroalkyl substance (PFAS), including measures to bolster funding for EPA to work on efforts to regulate the emerging contaminants.

The effort, led by Rep. Dan Kildee (D-MI), chief deputy whip of the House Democratic caucus, comes as lawmakers are completing work on spending measures for fiscal year 2021.

In a Dec. 4 letter to the chairs and ranking members of the House and Senate Appropriations committees, the 58 members urge support for funding PFAS measures in the final FY21 spending bills, adopting PFAS-related measures that are currently in four appropriations bills.

"This funding will help protect our communities from harmful [PFAS] chemicals," they write, referencing the substances' link to significant health effects such as thyroid disease and certain cancers, among other conditions. The chemicals have been found across the country in drinking water supplies, due to their use in firefighting foams and other commercial products.

Congress is under a deadline to agree to government spending legislation for the remainder of FY21, after passing in September a short-term continuing resolution to fund federal agencies at current levels until Dec. 11.

The lawmakers outline numerous funding measures they are seeking to pass, including at least \$14.5 million in additional appropriations for EPA's scientific and regulatory work. Among these would be: \$2.5 million to back EPA's regulatory work for designating two PFAS as hazardous substances under Superfund law; \$2.5 million for the development of effluent limitation guidelines -- or wastewater standards -- for PFAS; \$1.5 million for EPA to set enforceable drinking water standards for PFAS; and \$1.4 million to support reporting of PFAS releases under the Toxics Release Inventory -- something that was required under the FY20 defense authorization bill, the letter says.

Other EPA funding measures include \$3.5 million to aid EPA research on PFAS in air, agriculture settings, and in health and environmental risk assessments; \$2 million to study the interaction between PFAS exposure and susceptibility to COVID-19; and \$1.2 million to support work by the U.S. Geologic Survey on monitoring waterways for PFAS, as mandated by the FY20 defense law, it says.

The lawmakers also support inclusion of \$15 million for a multipurpose grant program that would assist states in their PFAS regulatory efforts and cleanup measures.

They are also backing a variety of defense-related PFAS measures, including that \$83.1 million go to Defense Department (DOD) accounts to clean up PFAS contamination at active military bases, and that \$50 million go to research and development efforts by DOD to develop and field-test PFAS cleanup, treatment and disposal technologies.

They also support measures that would require DOD reports to Congress on its program for testing PFAS in the blood of military firefighters, that it publicly release data on PFAS contamination found at its bases, and that it tell Congress the costs of cleaning up PFAS at active bases, among other provisions.

### **Scientists Seek Better EPA Data On PFAS Alternatives Amid Broad Uses**

Diana DiGangi, Inside TSCA

<https://insideepa.com/tsca-news/scientists-seek-better-epa-data-pfas-alternatives-amid-broad-uses>

Researchers are calling for EPA and other agencies to bolster their TSCA and other databases to help find safer alternatives to per- and polyfluoroalkyl substances (PFAS) after a new study by the researchers showed the chemicals are more widely used than previously believed but regulators lack adequate data on alternatives.

In a study recently published in *Environmental Science Processes & Impacts*, the scientists call for EPA and regulators in some Nordic countries “to create a ranking of the PFAS uses (without stating any numbers) based on the entire datasets they have collected.”

Published Oct. 30, the study, “An overview of the uses of per- and polyfluoroalkyl substances” published Oct. 30 in “*Environmental Science: Processes & Impacts*,” also recommends that a “matching database of viable alternatives to PFAS would be a logical progression” from the study’s findings.

The authors write that the study is the “first of its kind to systematically compile a wide range of known as well as poorly documented uses of PFAS,” though they add that their compilation is “not exhaustive” and more research on the matter is needed.

It identified many uses not previously described in the scientific literature, including “PFAS in ammunition, climbing ropes, guitar strings, artificial turf, and soil remediation.” PFAS are used “in almost all industry branches and in many consumer products,” with some products, like cell phones, including components that contain multiple PFAS.

The researchers identify several PFAS as priorities for phase out, including perfluoroalkyl acids (PFAAs) and their precursors in “firefighting foams, processing aids for the polymerization of fluoropolymers and in the surface protection of textiles, apparel, leather, carpets, and paper.”

But they also identify other PFAS for phase out, including hydrofluorocarbons, which are widely used in the electronics industry and in machinery and equipment. “Replacing them in these categories will therefore be an important but challenging task,” they write.

They also say that finding alternatives to fluoropolymers, a class of substances that a recent study shows are much more persistent in the environment than industry claims, will be important in the production of plastic and rubber and in coatings, paints, and varnishes.

Given how widely the chemicals are used, finding replacements is a “challenging and extensive task and is important in all use categories,” they write, though they note that EPA and other agencies’ existing databases fail to provide such data.

Lack Of Data

Such lack of available data on PFAS volumes, use and categories leave consumers, users, workers, and even regulators in the dark about these chemicals, “which limits their ability to assess and prevent harm to humans and the environment.”

For example, they note that while the 2016 revisions to the Toxic Substances Control Act (TSCA) has failed to prevent widespread industry use of confidential business information (CBI) claims to shield data from public view, the researchers say that “even a ranking [of PFAS uses] without exact figures would still be better than the current situation, in which very little is known about the quantitatively most important use categories due to CBI.”

“On the one hand, CBI may protect a specific industry's business, but on the other hand it also results in less protection for consumers, users, and workers from the chemicals. Even regulators are left in the dark about volumes, use categories, and PFAS uses, which limits their ability to assess and prevent harm to humans and the environment,” the scientists write.

The study's lead author is Juliane Glüge, a senior lecturer in environmental chemistry at the University of Zurich, along with several well-known PFAS researchers, including Ian Cousins, a professor in the Department of Environmental Science at Stockholm University, Rainer Lohmann, a professor of Oceanography at the University of Rhode Island, and Jamie LeWitt, a professor in the Department of Pharmacology & Toxicology at the Brody School of Medicine at East Carolina University.

### Regrettable Substitutions

During a Dec. 3 webinar hosted by the Collaborative on Health and the Environment, Lohmann warned that even if alternatives to many PFAS can be found, policymakers have a history of selecting alternatives that may not be safer than the substances they are replacing.

“We have a great history of regrettable substitutions in the U.S., and I don't know how we can turn it around,” Lohmann said. “[The 2016] TSCA reform hasn't made a difference. I would hope that similar to the EU, when you think about circular economy or sustainable chemistry, you realize the need to get away from any chemical that outlasts us. And that includes basically all PFAS,” said Lohmann, who is the director of the University of Rhode Island's Sources, Transport, Exposure and Effects of PFAS (STEEP) program

Lohmann's presentation to the webinar summarized the findings of an Oct. 12 paper he co-authored on the specific risks posed by fluoropolymers.

“Our recommendation is to move toward the use of fluoropolymers in closed-loop mass flows in the technosphere and in limited essential-use categories, unless manufacturers and users can eliminate PFAS emissions from all parts of the life cycle of fluoropolymers,” Lohmann told Inside TSCA.

During the webinar, Lohmann reiterated his belief that fluoropolymers are more persistent in the environment than industry believes them to be. Fluoropolymer-coated food contact materials like metal cookware could be leaching PFAS, he says, a result known to occur in chromatographic instrumentation at a level of parts per trillion.

Additionally, Lohmann says, the “drying step,” or sintering, of fluoropolymers has caused widespread atmospheric PFAS dispersion around polytetrafluoroethylene (PTFE), a compound most commonly known for its use in Teflon pans.

This has caused contamination around production sites in West Virginia and the Netherlands, as well as around use sites in Vermont, New Hampshire, and New York, he says. -- Diana DiGangi (ddigangi@iwppnews.com)

### **Water Utilities Blast EPA's Revised Draft Risk Review For 1,4-Dioxane**

Maria Hegstad, Inside TSCA

<https://insideepa.com/tsca-news/water-utilities-blast-epa-s-revised-draft-risk-review-14-dioxane>

Water utilities are requesting that EPA extend the comment deadline for its supplemental risk evaluation of 1,4-dioxane which was expanded to include a review of the chemical's presence in consumer products, arguing the evaluation falls short by failing to consider drinking water as an exposure pathway.

The request for more time to review the expanded risk evaluation issued last month echoes similar concerns raised by environmentalists, setting the stage for an issue that will likely have to be dealt with by the incoming Biden administration. The water utilities' concerns about drinking water exposures are similar to issues raised by these groups over EPA's other risk evaluations for the first 10 chemicals to be reviewed under the 2016 revisions to the Toxic Substances Control Act (TSCA).

The Association of Metropolitan Water Agencies (AMWA) "again disagrees with EPA's decision to exclude the evaluation of low-level exposures of 1,4-dioxane in drinking water in its risk evaluation," the group, which represents large municipal water utilities, writes in Nov. 30 comments to EPA. "AMWA believes that this decision underestimates the exposure of the population to 1,4-dioxane," the group says in asking for a 30-day comment deadline extension.

The Association of State Drinking Water Administrators (ASDWA) is asking EPA to extend the comment deadline by 40 days, or until Jan. 20, according to its Nov. 24 comments to the agency. "This extension would provide ASDWA the opportunity to more thoroughly review and understand how this risk evaluation may affect impacts from 1,4-dioxane to both groundwater and surface water sources of drinking water and the actions and decisions states and state drinking water programs will need to consider for ensuring public health protection," the group argues.

ASDWA's request, if granted, would push back the comment deadline to the day the Biden administration takes office.

AMWA's letter echoes similar concerns raised in a joint letter by several environmental groups, arguing EPA must extend the 20-day comment period because the supplemental review constitutes an entirely new assessment from the initial review issued in June 2019. The letter, signed by Safer Chemicals Healthy Families, Earthjustice, Environmental Defense Fund, Environmental Working Group, Natural Resources Defense Council, and North Carolina Black Alliance, among other groups, also called on EPA to submit the supplemental to peer review, a request that AMWA does not make.

EPA on Nov. 19 released its expanded draft evaluation of 1,4-dioxane, one of the first 10 substances for evaluation under TSCA section 6 since Congress reformed the statute in 2016. The chemical is widely used as a stabilizer for chlorinated solvents, as well as in building materials, degreasers, and to make soaps and detergents, among other uses.

The new draft supplement finds the presence of the chemical as a byproduct in eight consumer products poses no unreasonable risks that must be regulated under TSCA. EPA also concluded that 1,4-dioxane in surface waters used for recreation poses no risk.

The chemical's presence as a byproduct stems from ethoxylation, a process used to make the products less harsh, which leaves 1,4-dioxane as a byproduct in soaps, detergents and other consumer products.

A final decision from EPA that the chemical presents no unreasonable risk under TSCA would preempt states from regulating it under the conditions of use that EPA evaluated. While regulators in states like California and New York have been focused on regulating the presence of 1,4-dioxane in consumer products, there are also concerns about its presence in water, which could spur states to consider drinking water regulations. Such regulations would not be preempted by the EPA evaluation, as it now stands, because the evaluation does not address exposure from drinking water.

Instead, EPA for the first time and at the request of two industry trade associations, added eight conditions of use where 1,4-dioxane is present in consumer products as a byproduct from the ethoxylation process. Additionally, EPA added an evaluation of general population exposure to ambient water by swimming or eating fish.

This addition of ambient water exposures is surprising, since it was not part of the industry groups' request and EPA continues to exclude drinking water exposures from the scope of the evaluation. EPA, as it did in the first draft of the

evaluation and for others among the first 10 chemicals, has relied on its general policy of excluding exposure sources from TSCA evaluations that are or could be regulated by another agency office or another agency.

“EPA’s decision leaving “out drinking water [is] consistent with its position across all the evaluations that drinking water is covered by the Safe Drinking Water Act [SDWA], and is not going to be addressed under TSCA,” an environmentalist attorney told Inside TSCA last month. “However, this approach is inconsistent with the decision to address surface water discharges in the supplemental evaluation since these discharges, like drinking water, are subject to another environmental law but not being regulated. Both drinking water and surface water should be included in the evaluation.”

AMWA also notes that “EPA has now included exposures to the general population via ambient surface waters due to there currently being no nationally recommended Ambient Water Quality Criteria under the Clean Water Act [CWA]. AMWA would like to request further explanation as to why the exclusion of a standard under CWA calls for the agency to consider exposure via surface water, but a lack of national standard under SDWA does not,” the group writes.

“This seems inconsistent and again calls into question the agency’s decision to exclude drinking water exposure.”

Both drinking water groups note that 1,4-dioxane is a concern for their members and “is a potential concern for EPA as a drinking water contaminant, as it was included within both the Candidate Contaminant List and the third Unregulated Contaminant Monitoring Rule. However, currently, there is no maximum contaminant level for the chemical,” AMWA notes.

Once again echoing environmentalists’ concerns, AMWA calls on EPA to “expand upon how the agency’s offices work to coordinate actions regarding a chemical’s risk or necessity to be regulated under existing programs,” noting that EPA’s water office several months ago declined to decide whether to regulate “1,4-dioxane citing that EPA is currently unable to determine whether there is a meaningful opportunity for public health risk reduction. The agency then mentions the necessary science that it would need to utilize to make a determination, which includes the finalization of this risk evaluation. AMWA would like the agency to further explain why, if the Office of Water [OW] is relying on this risk assessment to make a regulatory determination for 1,4-dioxane, the Office of Chemical Safety and Pollution Prevention [OCSPP] excludes drinking water exposure from their analysis.”

The example is one that Jonathan Kalmuss-Katz, a staff attorney with Earthjustice, raised at a webinar on TSCA that ASDWA hosted for its members last August. During the call, Kalmuss-Katz and Lindsay McCormick, a program manager with Environmental Defense Fund (EDF), urged the state regulators to press EPA to implement the TSCA program more aggressively than it currently is. They argued that more rigorous TSCA evaluations and rules that address the regulators’ concerns will ease the strain on drinking water programs and limit source water contamination.

Kalmuss-Katz, too, noted the water office’s decision not to regulate 1,4-dioxane under SDWA.

“So this is fascinating,” Kalmuss-Katz said at the August event. “EPA is saying it doesn't have to consider the unreasonable risks under TSCA because the SDWA is handling it and under the SDWA, EPA is saying we don't have enough information so we're not going to address this in that statute here. And that just leaves a lot of people exposed.”

ASDWA, in its letter, “continues to stress the need to harmonize the regulatory approaches between OCSPP and [OW] so that potential downstream water contamination from chemicals such as 1,4-dioxane is not left to the states and water systems to solve.”

AMWA, however, writes that it “strongly disagrees with the agency’s reasoning” for excluding drinking water exposures from the evaluation.

“A risk evaluation is about assessing all potential exposures to the population and not necessarily regulating all of those potential exposures. However, if reducing exposures in drinking water is most achievable or economical via regulation under TSCA, then EPA should work to use its authorities under TSCA to strengthen pollution prevention,” AMWA argues,

adding that “it is easier, more effective and more equitable to control pollutants at the source, where they are highly concentrated, than it is to remove them at the consumer’s expense after they have entered a water body or supply source. Preventing pollutants from entering drinking water supply sources is a complex task, therefore AMWA urges EPA to consider all sources of known and reasonably foreseen 1,4-dioxane exposure -- including drinking water -- and include them all in the risk evaluation.” -- Maria Hegstad (mhegstad@iwpnews.com)

### **SBA to host roundtable on TCE, phthalate evaluations**

Inside TSCA

<https://insideepa.com/tsca-takes/sba-host-roundtable-tce-phthalate-evaluations>

The Small Business Administration’s Office of Advocacy (SBA) has announced it will host a second environmental roundtable this month on EPA’s final TSCA risk evaluation of trichloroethylene (TCE) as well as to discuss a pair of phthalate evaluations EPA is beginning at industry’s request.

SBA announced Dec. 7 that it will hold the roundtable virtually on Dec. 18.

The agenda includes a presentation by Katie McNamara of EPA’s toxics office on the final evaluation of TCE. The presentation will likely preview EPA’s regulatory options for the solvent under the revised Toxic Substances Control Act (TSCA). Christopher Bevan, director of scientific programs at the Halogenated Solvents Industry Alliance, Inc. (HSIA) is also scheduled to speak on the evaluation’s impact on small businesses.

The agenda also includes three additional speakers from EPA’s toxics office, John Allran, Collin Beachum and Jennifer Brennan, who are slated to discuss the draft scope documents for EPA’s pending evaluations of the phthalate chemicals diisodecyl phthalate (DIDP) and diisononyl phthalate (DINP).

SBA’s announcement follows EPA announcements last week that it will host a public webinar to review the final TCE evaluation and potential regulatory risk-management options on Dec. 15, as well as a call for nominations from small-entity representatives to advise the agency on how to craft potential risk management rules based on the final evaluations of TCE and carbon tetrachloride.

The scheduled events come on the heels of EPA’s Nov. 23 release of its final evaluation of TCE, finding that 52 of 54 evaluated uses of the chemical pose unreasonable risks that the agency must regulate.

Similar to its controversial draft, EPA’s final evaluation avoids basing its quantitative risk evaluation on the most sensitive possible endpoint -- the potential for fetal heart malformations -- which had been the agency’s historic practice. Environmentalists and public health advocates have lambasted EPA officials for moving away from that approach in the final TCE risk review.

Meanwhile, the DIDP and DINP evaluations represent the first two manufacturer-requested evaluations of existing chemicals EPA has received and accepted since Congress reformed TSCA in 2016 and added language allowing such requests.

EPA late last month released for public comment the draft scoping documents that will guide the evaluations, which may present a test for the law’s state preemption language because each evaluation proposes to examine toys and other uses currently regulated by states and federal safety regulators. The evaluations were requested by members of the American Chemistry Council’s (ACC) High Phthalates Panel, who specifically asked EPA to evaluate the use of the phthalates in toys and childcare articles.

### **FCM database highlights hundreds of hazardous chemicals for substitution**

Kathryn Carlson, Chemical Watch

<https://chemicalwatch.com/188864/fcm-database-highlights-hundreds-of-hazardous-chemicals-for-substitution>

Researchers behind the first global database of chemicals used in food contact materials (FCMs) have highlighted hundreds of hazardous substances that they say should be prioritised for further assessment or substitution.

Drawing data from 67 international lists compiled by industry or regulatory agencies, scientists at the Food Packaging Forum named 608 substances requiring further assessment and substitution because of various hazard properties. This was out of a total 12,285 chemicals in the database, with 494 falling into more than one hazard category.

The database was published with an accompanying research paper in *Environment International* on 30 November.

The paper stated that for over a quarter of the chemicals, no hazard information could be found in the sources consulted, representing a "significant" data gap. Industry in the EU and the European Food Safety Authority (Efsa) have refuted this claim.

It comes ahead of the European Commission's highly anticipated revision of FCM legislation. An inception impact assessment for this is expected to be published before the end of the year. A staff working document will follow at a yet-to-be-determined date.

### Findings

A total of 482 substances were identified as having properties hazardous to health or the environment, based on existing lists from Echa's classification and labelling inventory and a GHS list from Japan.

Fifty-four were highlighted as endocrine disrupting chemicals (EDCs), persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) substances and persistent organic pollutants (POPs) based on identification by Echa, the US EPA and other international sources.

The database categorised 378 substances as priorities for substitution because they are on REACH restriction, authorisation, or candidate lists, or included in California's Prop 65 list.

It also said that an additional 1,411 chemicals may present "similar levels of concern" to those officially classified as hazardous. But this evaluation was based on "non-authoritative, predictive hazard data" such as in silico modelling or literature analysis.

### Industry reaction

Efsa told Chemical Watch that the research findings are "to be considered, but with caution" because the database does not include information on whether the substances are still authorised for use or not.

It is also important to note the difference between risk and hazard for chemicals used in FCMs. The database only includes their intrinsic hazardous properties, while the agency evaluates exposure to consumers by considering this in combination with the substance's capacity for potential migration into food, it said.

The agency also said the lack of hazard information for certain substances "does not imply that industry potentially using the chemical(s) does not have the necessary data".

It said that the upcoming revision of EU FCM legislation should be "a driving force towards more harmonised assessment". And the agency is currently increasing cooperation with its sister agencies and national authorities to increase capacity under the one substance, one assessment initiative.

The European Printing Ink Association (EuPIA) disputed the claim of data gaps, saying that its members already carry out risk assessments for "all migratable printing ink components", which use REACH data, evaluations from European competent authorities and modern in silico approaches.

And Food Drink Europe's Dr Rebeca Fernandez said existing EU legislation requires "proper" risk assessment for all FCM ingredients. She added that the absence of hazard information in the database sources "does not mean a gap in the safety information of a substance".

Several sources from the US FCM industry did not respond to requests for comment in time for publication.

### **New measures proposed to curb chlorpyrifos exposure**

Britt E. Erickson, Chemical & Engineering News

<https://cen.acs.org/environment/pesticides/New-measures-proposed-curb-chlorpyrifos/98/web/2020/12>

The organophosphate insecticide chlorpyrifos would remain on the US market with additional restrictions, under a proposed interim decision announced Dec. 4 by the US Environmental Protection Agency. The proposed measures include changes to the label that limit how much chlorpyrifos can be sprayed, additional personal protection equipment for workers who spray the pesticide, and steps to reduce spray drift to non-target organisms.

The decision comes as several states, including California, phase out most uses of chlorpyrifos because of its ability to disrupt the developing nervous system. The EPA proposed to ban the use of chlorpyrifos on food in 2016, but reversed that decision in 2017 under the Trump administration.

Chlorpyrifos is registered for use on numerous agricultural crops, including corn, soybeans, alfalfa, oranges, wheat, and tree nuts. Overall its usage has declined over the past decade, but use on sorghum, sweet corn, sunflowers, tobacco and pears has increased, according to the EPA. Manufacturer Corteva announced earlier this year that it would stop making chlorpyrifos by the end of the year, citing reduced demand.

Environmental groups have been urging the EPA to ban chlorpyrifos since 2007. The agency denied a petition to do so in 2017 and again in 2019. The petitioners, represented by environmental advocacy group Earthjustice, are challenging the 2019 decision. Oral arguments were heard in July 2020, and the court has yet to issue a decision in the case.

The EPA's proposed restrictions do not go far enough, the petitioners say. "EPA is refusing to protect children from damage to their brains and learning disabilities. Even with the new protections, the agency is still failing children, who will continue to be exposed to chlorpyrifos at levels that cause lifelong damage," Patti Goldman, managing attorney at Earthjustice, says in a statement.

The EPA is accepting public comments until Feb. 5 on its proposed restrictions, as well as its draft human health and ecotoxicology risk assessments for chlorpyrifos. The agency expects to complete the registration review process for several organophosphate pesticides, including chlorpyrifos, in 2022.

### **'Ticking Time Bombs': Residents Kept In The Dark About Risks To La.'s Chemical Plants During Storms**

Sara Sneath, 89.9 WWNO

<https://www.wwno.org/post/ticking-time-bombs-residents-kept-dark-about-risks-las-chemical-plants-during-storms>

An analysis by WWNO/WRKF and Southerly reveals worst-case scenarios for toxic air pollutant releases or chemical explosions by 30 facilities in Louisiana.

This story was published in partnership with Southerly.

When Christine Bennett tried to return to her house in Mossville, on the outskirts of Lake Charles, after Hurricane Laura plowed through in August, roads were blocked around BioLab. A fire at the pool chemical manufacturer burned for three days after the storm. "They stopped us from getting to our house," she said. "While we were sitting there trying to get through our stomachs started to hurt."

Chlorine gas was detected around the BioLab facility in Westlake at a level that could cause notable irritation and temporary changes in lung function, according to the Environmental Protection Agency, or EPA. Bennett believes that was what made her family feel sick.

Chemical plants emit more toxic air pollution when they shut down ahead of storms coming ashore. And when hurricanes hit the Gulf Coast, which is overrun with chemical and fossil fuel facilities, pollution events often follow. That puts fence-line communities — neighborhoods directly adjacent to industrial facilities that are affected by its operations — at risk of exposure to toxic chemicals and explosions.

The 2020 hurricane season, which officially ended last week, brought a record breaking number of tropical storms. It's unclear whether climate change will lead to more hurricanes, but a growing body of research shows storms are becoming more intense, increasing the likelihood of a double disaster: a storm followed by toxic spills or explosions. Identifying at-risk communities is difficult because that information is hidden behind a series of bureaucratic hurdles.

Southerly and WWNO/WRKF identified the 30 facilities in Louisiana's coastal zone with the most toxic chemicals stored on site, according to the EPA's Toxic Release Inventory. Over two months, we navigated a burdensome administrative process to view what each facility filed with the EPA as the worst-case scenario for a toxic air pollutant release or chemical explosion. We found 10 scenarios that would result in toxic gases blowing 25 miles offsite. The most vulnerable cities have predominantly Black populations.

Facilities that keep large amounts of toxic or flammable chemicals on site are required to submit risk management plans, or RMPs, to the EPA every five years outlining worst-case scenarios for releases and the area and approximate number of people who would be vulnerable. About 12,300 facilities in the U.S. had active RMPs in 2017, according to the agency.

The chemical industry sector says access to risk management plans should be guarded because of the potential for the information to be used in a terrorist attack. To view the plans, residents must book an appointment at a federal reading room seven days ahead of time by leaving a message on a Department of Justice phone line. Paper copies are mailed to the reading room and residents can only take handwritten notes — no photos or scans — on the plans in the company of a U.S. Marshal. The two federal reading rooms in Louisiana are in Baton Rouge and Shreveport. Only 10 RMPs can be viewed by an individual per month.

Southerly and WWNO viewed the RMPs for the 30 coastal facilities with the highest amount of toxic chemicals stored on site in the 21 southern parishes that make up Louisiana's coastal zone. Donaldsonville — located in the industrial corridor of Louisiana — was within the area of impact for a worst-case release for nine of the 30 coastal chemical facilities examined, making it the most vulnerable city in our analysis. Gonzales, about 15 miles north, was within the vulnerability zone for eight facilities. Donaldsonville and Gonzales are predominantly Black towns.

Populations surrounding facilities with enough toxic storage onsite to warrant risk management plans are 11% more likely to be communities of color, 10% more likely to be low income, and 3% more likely to be linguistically isolated, according to the EPA.

Louisiana's metro areas are also at risk of a toxic chemical release or explosion. Baton Rouge and New Orleans were within the vulnerability zones of four coastal facilities each. According to a 2014 report by the Center for Effective Government, 61% of Louisiana children go to school within a vulnerability zone.

Each facility's plan had at least two possible scenarios of a toxic or flammable chemical release. Of the more than 60 scenarios we reviewed, the one that would impact the greatest number of south Louisiana residents was the Rubicon facility in Geismar, which uses phosgene to produce polyurethane for spray insulation and cushioning. Over the past five years, the facility has had three small phosgene gas releases that injured workers and three releases that necessitated a community shelter-in-place. Inhalation of phosgene can cause severe respiratory problems, including pulmonary edema, pulmonary emphysema, and death, according to the EPA.

In its risk management plan, Rubicon reported that under the worst-case scenario, 10,000 pounds of phosgene gas could be released, which would impact 890,000 people — about 19% of Louisiana’s population. The phosgene gas could blow 25 miles offsite in any direction, which could reach Baton Rouge and impact schools, residences, hospitals, and airports.

Rubicon’s general manager, Mark Dearman, said the conditions required by the EPA to create the worst-case scenarios are unrealistic. They assume there are no prevailing winds, so the chemical escapes in a circular pattern around the facility, and that a release occurs uninterrupted for 10 minutes as though “nobody is even in the plant.”

Ascension Parish officials are familiar with the hazardous chemicals at Rubicon, Dearman said. “The chemicals that you find up and down the river are very similar in nature,” he said. “We’re all very linked together as suppliers to one another.”

While Rubicon has had small releases of phosgene, the plant is unlikely to have the size of release identified in the worst-case scenario because the chemical is used in a process shortly after it’s made, Dearman said. Pipes that carry phosgene in its liquid form are inspected annually and an emergency scrubber can be used to neutralize remaining phosgene in preparation for storms.

Southerly and WWNO/WRKF’s analysis found that chlorine gas, released from BioLab after Hurricane Laura, was the most likely toxic chemical to trigger a worst-case scenario among the 30 coastal industrial facilities examined. Exposure to chlorine gas can cause bronchitis, asthma, and swelling of the lungs, according to the EPA.

Six companies with facilities in our analysis responded about their RMPs. Shell, which owns four plants in our analysis, would not answer questions for this story. “The safety of our people, the surrounding community and the environment remain our top priorities,” spokeswoman Rochelle Touchard wrote in an email. “All of our operations adhere to strict Federal, state and local regulations.”

Westlake Geismar spokesman Chip Swearngan said the company, which manufactures chlorine and PVC, coordinates its emergency response procedures, processes, and systems with the Ascension Parish Local Emergency Planning Committee. “Westlake Geismar has emergency response procedures covering severe weather scenarios,” he said, adding that they are reviewed annually. Representatives for Phillips 66, Occidental Chemical and Honeywell Geismar said that safety of employees and the community were a priority and that they communicate with local officials about emergency planning.

Public access to this information has been restricted from public access since shortly after the terrorist attacks on the World Trade Center on September 11, 2001, said Louisiana Chemical Association President and CEO, Greg Bowser. “This information is purposely kept out of the public eye to prevent it from falling into the wrong hands and being used to engineer another such attack,” he said. “As the country saw first-hand the destruction caused from the ill intent of others, it was deemed a matter of national security to keep the off-site consequence analysis information in the hands of only the most critical personnel.”

In a 2016 public comment on the Risk Management Program, the former Louisiana Chemical Association president, Dan Borne, wrote that analyzing safer chemical processes is costly and best applied during the design stage. He said Louisiana chemical plants have learned from accidents at other facilities, such as the 2013 explosion at the Williams Olefins Plant in Geismar, Louisiana, which killed two workers and injured 167 others. Sharing more information with emergency responders about worst-case scenarios would not help responders to better understand the risks of potential releases, but would “overwhelm” them, Borne wrote.

But a lack of access to information about the risks posed by toxic and flammable chemicals stored at industrial facilities puts communities, emergency first responders, and workers at risk, said Emma Cheuse, a staff attorney with the environmental law organization Earthjustice.

Hurricane Katrina knocked a storage tank off its base at Murphy Oil’s Meraux refinery, spilling one million gallons of oil. The oil contaminated about 1,700 homes in St. Bernard Parish. More than a decade later, Magellan Midstream’s tank

farm, near Galena Park, Texas, leaked 460,000 gallons of gasoline when Hurricane Harvey flooded the facility. The EPA estimated the spill released 282 tons of combined air toxics, including more than six tons of benzene, a known carcinogen. When the storm caused flooding at the Arkema facility in Crosby, Texas, more than 20 emergency responders were evaluated at a hospital after they inhaled smoke from peroxides that decomposed and caught fire. Seven of the first responders sued Arkema for failing to notify them of the dangers posed by the pollutant.

Many of the facilities we examined in this analysis were in the direct path of Hurricanes Laura and Delta.

“Communities need this information and they don't have access to it,” Cheuse said. “You have communities that are already overburdened by many different sources. That can turn into a ticking time bomb in a hurricane.”

Many residents of Mossville moved away after the South African company Sasol offered them buyouts to make way for a massive chemical complex in 2014. But some residents, like Bennett, did not want to leave the historic Black community, which was founded by survivors of slavery in the 1790s.

Bennett owns two acres of land where she wanted to build a women's shelter. But the encroachment of industry has kept that plan from becoming reality. “They took that dream from me,” Bennett said.

She worries about the long-term health impacts of breathing in pollution. “Thank God that this BioLab thing happened and we were evacuated then,” she said. “But if it would have happened on a day when there wasn't a storm, they would do their little shelter in place. Lord, that's a joke. You can close the windows. You can't close the cracks.”

Mossville would be vulnerable in the worst-case toxic chemical release for six of the coastal industrial facilities examined in the analysis by Southerly and WWNO/WRKF. Without adequate information about the risks, Bennett doesn't know the safest evacuation route. “We worry about an explosion all the time in that area,” Bennett said. “You just have to pray that it never happens.”

The Obama administration initiated changes to the Risk Management Program to make chemical hazard information more accessible to communities and first responders after a 2013 explosion at a fertilizer plant in West, Texas killed 15 people, including 10 volunteer firefighters. At that time, the EPA said making information in RMPs more accessible would improve emergency preparedness and residents' understanding of how facilities addressed potential risks. “EPA also believes that the revisions will likely contribute to the prevention of future chemical accidents,” the agency wrote. But the Trump administration stopped the regulations from taking effect in 2017.

Cheuse from Earthjustice sued the EPA for delaying the regulations from taking effect on behalf of grassroots environmental organizations throughout the U.S., including Louisiana Bucket Brigade. The U.S. Court of Appeals for D.C. ruled the delay was illegal, forcing the Trump administration to take action. In 2019, the EPA rolled back significant parts of the rule, abandoning requirements for facilities to seek a third party audit, perform root cause analysis after major chemical accidents, and to consider safer technologies and alternative procedures.

Of the 30 coastal industrial facilities examined by WWNO/WRKF and Southerly, 22 identified hurricanes as a major hazard. However, most of the facilities did not consider a passive mitigation measure, such as dikes or berms that could contain substances and minimize exposure, in their risk management plan for the worst-case scenario that impacted the greatest number of people. Mike Hockey, spokesman for Honeywell's Geismar plant that manufactures chemicals used to make refrigerants, high octane gasoline and foam insulation, said the plant “was designed to withstand hurricane force winds” and shuts down process units when the wind reaches 50 mph.

Paul Orum, a consultant on chemical facility safety and security, said the industry has created a sort of “know nothing, do nothing” environment in which they don't disclose the risks of large amounts of toxic and flammable chemicals kept on site and don't do enough to prevent disasters. While the chemical industry has created best practices for hurricanes, such as securing tanks and building dikes, the regulatory requirements have not evolved with climate change.

“It certainly makes sense for the regulations to catch up to the reality of increasing strength storms and floods,” Orum said.

Ways to reduce another double disaster have been identified but aren’t required, said John Pardue, a professor of environmental engineering at Louisiana State University. For example, chemical storage tanks could be better secured to prevent them from getting pushed off their base during hurricanes.

Several major pollution events along the Gulf Coast have resulted from giant storage tanks floating off in flood water and crashing to the ground as the water receded. The size of the tanks makes them extremely buoyant when they are not full of liquid. “It’s like trying to hold a basketball down in a pool,” Pardue said.

Some companies top off tanks that aren’t full, making them less likely to float away. “The idea there is that the more chemical there is the heavier the tank is and the less it’s going to float around,” he said. “But I don’t know what percentage of them actually do it.”

Posts that stop the tanks from moving side-to-side, but allow them to float up and down could also prevent this kind of spill, Pardue said. But these measures are not mandatory. Some companies are also finding new technologies that don’t require storage of large amounts of toxic chemicals. “There’s no regulation geared to emergencies,” he said. “There are people who don’t sleep at night because of this.”

Earthjustice filed another lawsuit against the EPA in Dec. 2019 for its rollback of the Obama-era improvements to the Risk Management Program. The Louisiana Bucket Brigade is a plaintiff in the lawsuit. The United Steelworkers, New York, and a number of municipal governments have also joined.

Even if the Obama administration regulations are put back in place, there is more that could be done to prevent another double disaster, said Terry McGuire, a senior legislative representative with Earthjustice. “What we’re defending here were steps in the right direction,” McGuire said. “But this was not a robust or radical rewrite.”

Earthjustice will push the administration under President-elect Joe Biden to make strengthening the law a priority. “There’s a lot of ways to bring about reform. It doesn’t make sense that you have to go to an EPA reading room for this information,” McGuire said. “It’s time for that change. It’s unacceptable and that’s what we’re fighting for.”

### **State To Study Level Of PFAS Toxins Reaching Colorado’s Crops**

Logan Smith, CBS Denver

<https://denver.cbslocal.com/2020/12/07/colorado-health-water-pfas-agriculture-cdphe-firefighting-foam-irrigation/>

(CBS4) — State agencies are assessing new data compiled by Colorado researchers that suggests a family of toxic chemicals could be reaching the state’s vegetables – and potentially consumers – through contaminated irrigation.

The Colorado Department of Public Health and Environment and the Colorado Department of Agriculture are examining the potential contamination of irrigation waterways in areas that have previously been tested for contamination of drinking water.

In July, CDPHE announced the results of extensive testing of the state’s water sources for PFAS, or perfluoroalkyls and polyfluoroalkyls substances. PFAS have been dubbed “forever chemicals,” a reference to their resistance to decay. They are widely used in consumer products and industry applications due to their resistance to oil, grease, water and heat, as stated by the U.S. Food and Drug Administration. Notably used in Teflon, they more recently came to be known for their use in older firefighting foams used at airports, particularly following water testing downstream from those facilities.

U.S. commercial airports are required to phase out use of firefighting foam containing PFAS by 2021 by order of the Federal Aviation Administration. U.S. military bases have been instructed by Congress to phase out its use by 2024.

CDPHE's sampling earlier this year accounted for about half of the drinking water systems in the state serving around three-quarters of the population, according to the state health department. The department found four locations tested above healthy limits established by 2016 guidelines set by the Environmental Protection Agency.

However, varying levels were found in every waterway that was tested.

"All of the samples collected had some detectable level of the chemicals," CDPHE stated via news release in July. "The sample collected at the mouth of Sand Creek in Commerce City was above the EPA drinking water health advisory, but the state isn't aware of anyone directly drinking this affected water. Nonetheless, high levels of the chemicals in streams can impact downstream drinking water supplies since they don't break down."

Only one farm was found to be using water with high levels of the chemicals during the state's sampling of drinking water. Per the joint press release from the health and agriculture departments, that farm has since changed its operations.

A recent study by researchers at the Colorado School of Mines modeled the likelihood of the elements to make their way through irrigation systems and into edible plants. The study, based on simulations, indicated "that eating lettuce watered with contaminated irrigation water may put people at risk for harmful health impacts," CDPHE stated in a November press release.

Juliane Brown, an environmental engineering PhD candidate at Mines who led the research, said, "While there has been an emphasis on identifying and cleaning up drinking water impacted by PFASs, much less attention has been given to assessing risks from consuming produce irrigated with PFAS-contaminated water. This study brings much needed attention to this issue and highlights the potential risks associated with this critical exposure pathway."

Christopher Higgins, professor of civil and environmental engineering at Mines and senior author of the study, added, "Even when drinking water has been treated and is considered safe, there is a potential for exposure from vegetables irrigated with contaminated water or grown in contaminated soil. This study shows that regulations that solely target perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) in drinking water are inadequate to protect human health risks from PFASs."

Conclusive research on the implications of human consumption of PFAS is still developing, but impacts to health are acknowledged. An agency of the U.S. Department of Health and Human Services recently cited evidence of PFAS contributing to reduced ability of the immune system's resistance to COVID-19.

"These chemicals are present throughout our environment," said Kristy Richardson, state toxicologist, CDPHE, "and Colorado is committed to using the best available science to continually refine our recommendations. A key priority is to reduce exposure to these chemicals wherever they occur."

CDPHE recommends anyone using well water for drinking or gardening should have it tested.

The School of Mines study was published Nov. 17th in "Environmental Science And Technology." The research was supported, in part, by the National Science Foundation Graduate Research Fellowship and the U.S. Environmental Protection Agency.

### **New 2,4-D and Dicamba Data**

Emily Unglesbee, Progressive Farmer

<https://www.dtnpf.com/agriculture/web/ag/crops/article/2020/12/07/four-things-missouri-scientists-2-4?referrer=email%3cspan%20id=%22ms-outlook-android-cursor%22%3e!~OMSelectionMarkerEnd~>

ROCKVILLE, Md. (DTN) -- University of Missouri Extension weed scientist Mandy Bish unveiled the results of the group's latest research on new auxin herbicide technologies at the annual MU Crop Management Conference, held virtually Dec. 1-2.

MU weed scientists, who led the charge on early investigations of dicamba volatility and temperature inversions, have now turned some of their attention to 2,4-D-choline as its use on 2,4-tolerant Enlist crops ramps up.

Here are four big takeaways for farmers to keep in mind for the 2021 spray season:

### 1. DICAMBA AND 2,4-D HAVE BEEN FOUND IN RAINWATER

One study presented by the MU team involved collecting rainwater weekly from 12 sites around the state in 2019 and testing it for dicamba and 2,4-D. The preliminary results show that dicamba was detectable in rainwater throughout the season at some sites. In the sites located in the southern corner of Missouri, known as the Bootheel, the dicamba amounts in the rain were high enough to injure sensitive crops, especially with multiple exposures.

The results directly correlated with adoption rates of Xtend crops, Bish explained. Where adoption was higher, dicamba was more frequently detected in the rainwater, and at higher rates. Data from nearby weather stations also indicated that lack of wind and inversion conditions likely influenced dicamba's presence in rainwater.

"It doesn't paint a good picture of dicamba technology's success in the Bootheel, even with label changes," Bish said.

The researchers also detected 2,4-D in some of the rainwater samples, despite little to no Enlist acreage in the state that year, and Bish warned that could increase as Enlist acreage expands.

"We do detect more dicamba right now, but I anticipate that, going forward, 2,4-D amounts in rainfall will increase in the Bootheel," she noted. "Of course, it takes a lot more 2,4-D to injure soybeans, but that doesn't bode well for tomatoes or grapes or other sensitive crops in the area."

### 2. ENLIST PRODUCTS ARE LESS VOLATILE BUT STILL PRONE TO PHYSICAL DRIFT

Along with weed scientists from other universities, the MU researchers did multiple studies assessing the volatility of the over-the-top dicamba formulations (XtendiMax and Engenia) as well as 2,4-choline (Enlist One) and 2,4-D-choline and glyphosate premix (Enlist Duo). The studies will be repeated in 2021, as well.

MU results showed that, in field low tunnel studies, the dicamba formulations were more volatile once glyphosate was added to the tank, a common finding among weed scientists in recent years. As a result, some visual injury symptoms to surrounding soybeans were still visible at 28 days after application. (Keep in mind that these studies used the 2018 versions of the dicamba herbicides; the 2020 registrations require new volatility-reducing agents to be used with XtendiMax and Engenia).

While some volatility of Enlist herbicides was observed 14 days after application, by 28 days after application, no visual injury symptoms were visible on surrounding cotton plants from any of the Enlist spray mixtures.

The MU team also tested Enlist Duo and XtendiMax in larger field studies, sprayed on the same day and in the same field. Fourteen and 28 days after the application, the researchers could find no visual injury symptoms on the soybeans surrounding the Enlist application, but dicamba injury symptoms to surrounding soybeans radiated from the Xtend field in all four directions, regardless of wind direction.

"It does seem that Enlist One and Enlist Duo are less volatile than dicamba products," Bish said. "But 2,4-D can still be moved in the air, and it is still susceptible to temperature inversions -- I want to remind people that those risks do not go away with reduced volatility."

### 3. LIBERTY AND DICAMBA ARE NOT A GOOD MIX

With three-way-tolerant XtendFlex soybeans ready for a commercial launch in 2021, the MU team added another ingredient to their low tunnel volatility study -- Liberty (glufosinate).

The results were not good. Mixing glufosinate with Engenia or XtendiMax caused significant volatility, with the tank mixes producing visual injury symptoms on 30% to 40% of the surrounding soybeans nearly a full month after application.

Bayer and BASF are still working to put out new tank-mix-approved products for XtendiMax and Engenia for 2021, but in the past, glufosinate has not been an approved partner for either.

#### 4. WINDLESS DAYS ARE A CONCERN FOR BOTH 2,4-D AND DICAMBA

Wind and its ability to contribute to physical drift of herbicides is well known, but Bish is more worried about clear, windless days for auxin herbicide applications. "Some wind is needed to disperse herbicide particles, which remain in the air following applications," Bish told DTN. "If there is no wind, herbicide particles can get trapped in stable air."

One common cause of stable air masses is temperature inversions -- the atmospheric phenomenon where a mass of cool air gets trapped near the ground and suspends air particles, whether they be dust, water vapor -- or pesticides. "We know from our previous work that more dicamba gets suspended in the air when it is applied during an inversion, and we have no reason to believe 2,4-D choline would be any different," Bish warned.

Any herbicide droplets or volatilized particles that get caught in inversions can easily move off target when wind finally arrives to end the inversion. But even without wind, they can slowly seep into low-lying parts of a field, as the cold air mass seeks the lowest point around, a type of air movement known as "cool air drainage," Bish said.

In an effort to limit this risk, current dicamba labels ban spraying when winds are below 3 mph and for one hour after sunrise and two hours before sunset. Enlist product labels caution against spraying in an inversion but have no such restrictions.

MU scientists' past analysis of weather stations from seven states shows that inversions occur frequently in the afternoon and evening hours of May, June and July. Newer data from Tennessee and Missouri show that those inversions frequently form earlier than two hours before sunset -- the current cutoff for applications on the 2020 dicamba labels.

"Sunset is not a good predictor in every location," Bish said. "I'm still in favor of applicators using other known indicators of an inversion." Those include clear skies, lack of wind, and odors and noises traveling long distances. See more on inversions here: .

"We know from our past research that geographies with less wind have more off-target dicamba movement issues," Bish said. "And when you also have high adoption in these geographies with less wind, you have even more issues."

The off-target movement of 2,4-D wasn't as prominent in Missouri as dicamba in recent years, but with the state's inversion frequencies and increasing Enlist acreage, Bish believes that could change. "As higher Enlist adoption occurs and more product is sprayed, stable air could become an issue for it, too," she warned.

#### **Group sounds alarm on PFAS in widely used pesticide**

E.A. Crunde, E&E News

[https://www.eenews.net/greenwire/2020/12/08/stories/1063720167?utm\\_campaign=edition&utm\\_medium=email&utm\\_source=eenews%3Agreenwire](https://www.eenews.net/greenwire/2020/12/08/stories/1063720167?utm_campaign=edition&utm_medium=email&utm_source=eenews%3Agreenwire)

A family of toxic chemicals appears in a pesticide widely used for mosquito control, according to findings by an environmental group urging states to take action.

Laboratory test results shared by Public Employees for Environmental Responsibility (PEER) show Anvil 10+10, a pesticide, contains per- and polyfluoroalkyl substances (PFAS).

The testing found roughly 250 parts per trillion of PFOA, a chemical largely phased out of U.S. production. The organization also found 260 ppt to 500 ppt of HFPO-DA, part of the chemical process used for GenX, which has sparked significant litigation over water contamination.

Anvil 10+10 is used by numerous states and is applied both from trucks and aerially.

In a letter to California's Department of Pesticide Regulation (DPR) circulated yesterday, Pacific PEER Director Jeff Ruch noted to Director Val Dolcini that the state has response and notification levels in place for PFOA that are exceeded by the amount found by PEER. He called on the state to cease the use of Anvil 10+10 and ensure any replacement does not contain PFAS.

Ruch also said the state should require pesticide companies "to provide comprehensive tests of their products showing the absence of fluorinated chemistry before the DPR allows the sale or use of such pesticides."

In response to a request for comment, DPR said that the department is engaged in conversations with other agencies about PFAS compounds but that Anvil 10+10 is registered in California as not including PFAS compounds. "DPR reviewed all components of the formulation as a part of its registration process," spokesperson Abbott Dutton said. "We are currently reviewing the PEER letter and associated data."

Sometimes referred to as "forever chemicals," PFAS do not naturally break down in the environment and are linked to multiple severe health risks. One major source of public alarm is PFAS in drinking water, and advocates have repeatedly called on EPA to set a maximum contaminant level for the chemicals. Currently EPA has only a 70 ppt health advisory for both PFOA and PFOS in drinking water.

PFAS appear in a number of household items, like nonstick pans and dental floss, as well as industrial products like firefighting foam. Environmental groups are now concerned about their presence in pesticides, pointing to Anvil 10+10 as an indicator of a bigger problem. PEER initially announced the results of its testing last week, emphasizing the insecticide's use in Massachusetts, as Anvil 10+10 is part of the state's spraying program.

The group said it alerted the Massachusetts Department of Environmental Protection (MassDEP) to the presence of PFAS and the department independently conducted its own testing. That additional testing of nine samples of Anvil 10+10, taken from five containers, found eight different PFAS including both PFOA and PFOS.

Kyla Bennett, who directs science policy for PEER and focuses on the New England region, praised MassDEP's response. "They are concerned, they did their own tests, they were forthcoming with us about the results. ... They were just awesome," Bennett said. "I wish every state were as proactive."

Massachusetts has used the insecticide for two decades to curb Eastern equine encephalitis. The amount of PFAS detected in Anvil 10+10 exceeds the state's limits, and MassDEP has said it is looking closely at the issue. In 2019, the state applied Anvil 10+10 to more than 2 million acres of land.

Clarke Mosquito Control Products, the Illinois-based company behind Anvil 10+10, said in an email that it doesn't add PFAS to the product at any stage. "Additionally, PFAS chemistry is not a result of degradation of Anvil or any of its components," wrote Clarke spokesperson Laura McGowan, who said the company conducted an internal inquiry of its manufacturing and supply chain after PEER reached out with its test results.

McGowan said the company is looking into testing options for its products and has sought input from MassDEP and EPA on appropriate methodology.

"EPA does not require pesticide manufacturers to routinely test for PFAS and we are not aware of any generally accepted and validated testing protocols to test oils or solids with the specificity required for parts-per-trillion quantification," said McGowan, noting EPA is working on a test method for pesticide products.

PFAS can appear in products during the manufacturing or packaging stages, but they have also been used in pesticides before. They can be inert ingredients, meaning those that exist alongside the active ingredients meant to kill or repel an insect or pest. Information about inert ingredients is sometimes withheld by manufacturers; McGowan said PFAS are not an inert ingredient used in Anvil 10+10.

An "inert finder" provided by EPA indicates the agency permits some PFAS to be used as ingredients, for non-food use only. PEER reached out to the agency in late November about Anvil 10+10, but Bennett said EPA has not been in touch about the insecticide. EPA did not respond to a request for comment by publishing time.

PEER found 26 states are using Anvil 10+10, but Bennett says there are likely more. In addition to California and Massachusetts, the organization also plans to reach out to New York.

### **Most Americans Have Roundup in Their Bodies. Researchers Say One Week of Eating Organic Can Help.**

Amy Martin, Food Tank

<https://foodtank.com/news/2020/12/most-americans-have-roundup-in-their-bodies-researchers-say-one-week-of-eating-organic-can-help/>

One week of eating organic can dramatically reduce pesticide levels in the body, according to a recent study conducted by the Health Research Institute, Commonweal Institute, and Friends of the Earth.

The group of researchers tracked the pesticide levels of four families across the United States. They took measurements after six days on a non-organic diet and again after six days on an organic diet.

he study, and a companion study published last year, found 16 different kinds of pesticides and chemicals in every participant. But after six days of organic eating, these compounds decreased an average of 60.5 percent—and some as much as 95 percent. Glyphosate, the main ingredient in Roundup and the most used pesticide in the world, dropped an average of 70 percent.

A study by agricultural economist Charles Benbrook finds that the use of glyphosate has spiked 15-fold globally since genetically modified, "Roundup Ready" crops were introduced in 1996. The percentage of Americans with traceable levels of glyphosate in their bodies rose from 12 percent in 1972 to 70 percent by 2014, according to researchers at the University of California San Diego.

Glyphosate exposure has been associated with a wide range of health problems. Researchers have flagged glyphosate as a probable carcinogen, and the chemical has been linked to kidney disease, reproductive issues, DNA damage, hormone and digestion disruptions, fatty liver disease, and more.

The recent study poses organic eating as a straightforward way to avoid glyphosate. But the authors also recognize that organic food isn't always accessible.

To improve the availability of organic foods in the United States, the team calls for top-down policy changes—like stricter regulations on pesticide use, more federal research into the effects of pesticides, and aid for farmers as they transition to organic farming.

"Our federal pesticide policy system is broken, and we need people shouting about that," Dr. Kendra Klein, a co-author of the study and Senior Staff Scientist at Friends of the Earth, tells Food Tank. "Companies like Bayer, Syngenta, and Dow are spending millions lobbying, and they're also spending tens of millions of dollars to shape the narrative and perpetuate myths, like the myth that we need pesticides to feed the world."

Klein points out that just 1 percent of U.S. federal agricultural research dollars go towards ecological farming, and pesticide regulations are few and far between. In fact, the U.S. Environmental Protection Agency (EPA) has loosened some pesticide restrictions in recent years. Between 1993 and 2008, the EPA raised the threshold for glyphosate residues on oats from 0.1 ppm to 30 ppm.

Larry Bohlen, Chief Operating Officer at HRI Labs and another co-author of the study, also emphasizes a lack of resources for farmers who want to transition to organic farming. He explains that universities and government training programs have taught farmers how to use pesticides for decades. "If they placed models of successful organic farming side-by-side with the synthetic chemical models, farmers would have choices instead of just one option," Bohlen tells Food Tank.

Stringent pesticide regulations might seem like a lofty goal in the U.S., says Klein, but change is already underway abroad. Earlier this year, the European Union announced plans to halve the use of "high risk" pesticides by 2030 and make at least 25 percent of farmland organic.

To spur change in the U.S., Bohlen urges consumers to vote with their wallets, if they're able. "Each person's purchase is a small vote that, when considered collectively, sends a signal back to the grocer and the farmer about what type of food is desired. It's your purchase that has one of the biggest effects on land, farmer, and consumer health."

### **Suit challenges new dicamba cutoff dates, buffers**

Tom Doran, AgriNews

<https://www.agrinews-pubs.com/2020/12/07/suit-challenges-new-dicamba-cutoff-dates-buffers/akdx5cg/>

WASHINGTON — American Soybean Association and Plains Cotton Growers representatives voiced their support for the recent five-year registration for dicamba, but don't agree with the national cutoff dates and larger buffers and have brought it to court.

The lawsuit, brought to the U.S. District Court for the District of Columbia, centers around a handful of new restrictions added by U.S. Environmental Protection Agency to the labels of XtendiMax, Engenia and Tavium herbicides.

The new labels include national cutoff dates for use — June 30 for soybeans and July 30 for cotton — as well as larger buffers than under the previous labels.

The new regulation requires a downwind buffer of 240 feet to protect sensitive areas and 310 feet in areas where endangers species are located.

Under the previous two-year registration that expires this year, in counties where endangered species may exist, the downwind buffer was 110 feet and there was a new 57-foot buffer around the other sides of the field. The 110-foot downwind buffer applied to all applications, not just in counties where endangered species may exist.

The EPA on Oct. 27 approved a new five-year registration for over-the-top application of XtendiMax with VaporGrip Technology and Engenia Herbicide and extended the registration for an additional dicamba product, Tavium Plus VaporGrip Technology.

Bill Gordon, ASA president and Minnesota farmer, said the lawsuit is not intended to vacate the new label.

"The only thing we're challenging is the date and the buffer. So, nothing is really going to affect a grower who purchased dicamba or is planning to use it next year," Gordon said.

According to the lawsuit, "EPA's registration decision will arm growers with an essential weed-management tool for the 2021 growing season and beyond. But some aspects of the registration decision are problematic for growers, who depend on reasonable, consistent access to dicamba for use on dicamba-tolerant soybeans and cotton."

“In particular, several registration conditions impose growing restrictions and disrupt growing seasons, which will diminish crop yields, cut productivity and drive up operational costs. Some of these conditions are significantly more stringent than those found in past dicamba registrations.

“This action challenges those conditions as arbitrary and capricious and beyond the agency’s authority under Federal Insecticide, Fungicide and Rodenticide Act, the Endangered Species Act and the Administrative Procedures Act. More specifically, this case seeks remand of EPA’s temporal dicamba application restrictions and spatial application buffers.

“Resolving these legal uncertainties is important because growers are already making planting and seed-selection decisions for the 2021 growing season. Indeed, growers are already investing billions of dollars into dicamba, dicamba-tolerant soybean and cotton seed and related products — investments that will be lost if EPA’s broader registration decision were undone.”

#### Date Restrictions

The lawsuit states the June 30 cutoff date is problematic for two reasons.

“First, weather, pestilence and other acts of God often push soybean growers, like cotton growers, into late season planting and replanting. The June 30 cutoff, then, likely leaves thousands of late season soybean growers largely defenseless against weeds,” the lawsuit noted.

“Compounding this, soybean growers annually battle late-emerging weeds, many of which are glyphosate-resistant. For example, waterhemp routinely emerges as late as July and August and often in glyphosate-resistant form. Banning farmers from using dicamba against these doubly dangerous weeds essentially forces farmers to capitulate to these weeds.

“Therefore, in any given growing season, some growers will need to make their post-emergent application(s) of dicamba after June 30 (soybean) or July 30 (cotton). If growers are unable to make post-emergent applications, their fields may suffer from weed infestations — which, in turn, would lead to reduced yield and increased weed management costs.”

#### Buffer Expansion

The legal move also addressed the 240-foot mandatory buffer and the 310-foot buffer in counties where endangered species may exist.

“While some of these buffers might appear to afford some degree of flexibility, they are, as a practical matter, very difficult to manage,” the lawsuit stated.

“Because wind direction changes daily, so too can these buffers. Therefore, in reality, these ‘downwind’ buffers can transform into significant omnidirectional growing restrictions.

“The on-the-ground effect of these ‘buffers’ will lead to significant acreage of farmland being taken out of production for fear of violating the buffer rules. In practice, these buffers chop huge swaths of farmable land off the edges of growers’ fields.”

The lawsuit details that a soybean farmer who farms a 54-acre field and lives in an ESA-restricted county would lose one-third of the farmable land to the ESA buffer of 310-feet. That grower must either leave 15 acres fallow every year or sacrifice almost a third of his soybean harvest.

“These new buffers require growers to leave cropland empty, driving down farm profitability and financially harming growers,” according to the lawsuit.

#### **EPA proposes limits on chlorpyrifos**

Don Jenkins, Capital Press

[https://www.capitalpress.com/ag\\_sectors/livestock/epa-proposes-limits-on-chlorpyrifos/article\\_06116432-38d7-11eb-b1c9-877dda3e89f3.html](https://www.capitalpress.com/ag_sectors/livestock/epa-proposes-limits-on-chlorpyrifos/article_06116432-38d7-11eb-b1c9-877dda3e89f3.html)

The Environmental Protection Agency will consider new restrictions on the pesticide chlorpyrifos, including limiting its use to about a dozen crops, according to a new review.

Final decisions aren't due until at least 2022, and the EPA indicated it may opt for less restrictive measures. The pesticide's future use may depend on resolving its affect on the brains of infants and unborn children.

EPA said the science is unsettled. If the agency chooses its most-cautious approach, registered uses for chlorpyrifos could be reduced from more than 50 crops to select, "high-benefit" crops.

Apples, alfalfa, strawberries, and spring and winter wheat are on the list, as are tart cherries, asparagus, citrus, cotton peaches, soybeans and sugar beets.

"It's a good place to be if you need that material," said the Northwest Horticultural Council's David Epstein, vice president for scientific affairs. "You still have 50 that fall into the other category."

The EPA on Monday opened a 60-day comment period on its "proposed interim registration review decision." The document presents ways the EPA may reduce exposure to chlorpyrifos, including to pesticide handlers.

The EPA said residential exposure to chlorpyrifos was "negligible." The only approved home use is for roach bait in child-resistant packages. Exposure to chlorpyrifos in drinking water in highly localized areas is a concern, though assessing the exposure is difficult, according to the agency.

Washington Friends of Farms and Forests executive director Heather Hansen criticized the EPA for relying on models that she said overstates actual exposure in drinking water.

"Take that out, you're left with data that shows current uses are safe," she said.

"It is very, very concerning to lose (chlorpyrifos) for vegetable crops," she said. "That would be significant."

Anti-pesticide, environmental and labor groups have been advocating for a total ban on chlorpyrifos for more than a decade. California and a handful of other states already have moved to limit or phase out chlorpyrifos. Ban bills passed the Oregon House and Washington Senate this year, but then stalled.

Ban advocates fought the Obama administration, which handed off the issue to the Trump administration. A new White House administration will be in office when the comment period closes.

Lawsuits to force a ban have yet to be fully resolved. The case is with the 9th Circuit Court of Appeals.

Earthjustice attorney Patti Goldman, who represents the groups pursuing a ban, criticized the EPA's proposals.

"Even with the new protections, the agency is still failing children, who will continue to be exposed to chlorpyrifos at levels that cause lifelong damage," she said in a statement Monday.

Farm groups defend chlorpyrifos as a safe and an effective crop defender since 1965. Chlorpyrifos use has been declining over past decade, but remains critical for some crops, according to the EPA. Soybeans, alfalfa and corn account for 50% of all chlorpyrifos used in the U.S.

Washington apple growers apply chlorpyrifos once a year when trees are dormant. Alternative pesticides could cost up to \$51 more an acre, according to the EPA.

The EPA said chlorpyrifos controls garden symphylans in Oregon strawberries. Abandoning fields translates into a \$7,800 loss per acre, the EPA stated.

Ranchers use chlorpyrifos to keep horn flies from cattle. Horn flies have developed a tolerance for another class of insecticides, according to the EPA.

Mosquito control districts use chlorpyrifos, as do golf courses to kill ticks that carry Lyme disease. EPA indicated it was inclined to allow chlorpyrifos to be used to control pests and preserve public health.

### **FIFRA policy change and commonly used pesticide lawsuits and regulations**

Alaina Dismukes, Delta Farm Press

<https://www.farmprogress.com/farm-business/fifra-policy-change-and-commonly-used-pesticide-lawsuits-and-regulations>

Several legal issues that affect agriculture have been brought to court in 2020. During the new regulations made for the 2021-2025 dicamba label, a new Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) policy change could affect not only dicamba but all pesticides that are registered under FIFRA. Cases made against glyphosate, Enlist Duo, and Chlorpyrifos have also raised concerns for users of these products.

During a National Agricultural Law Center webinar, Brigit Rollins and Harrison Pittman discussed the top ten legal issues affecting agriculture over this year. Rollins, staff attorney at the National Agricultural Law Center, addressed the FIFRA policy change and pesticide lawsuits and regulations in 2020.

FIFRA policy change

Related: Know your nematode numbers

A footnote made in the new registration decision for dicamba included a significant FIFRA policy change.

"The change is significant because it not only affects dicamba-based pesticides, but it would affect all pesticides that get registered under FIFRA," Rollins said. "In this memo accompanying the dicamba registration, there was a footnote that alters EPA's policy on FIFRA section 24(c) permits. These are also known as special local needs permits."

Related: Hay and forage tips for winter and spring

FIFRA section 24(c) allows states to alter use requirements for federally registered pesticides, but to do so, they need to apply to EPA for a local needs permit.

"This permit allows states to add a 'use requirement' just for that state," she said. "Say a pesticide is registered for use on certain crops, and the state wants to expand the crops that the pesticide can be used on. They can apply for a FIFRA section 24(c) permit."

"Typically, these 24(c) permits are used to broaden pesticide use. However, in the past few years, there's been a trend of states using those permits to implement application cutoff dates for dicamba as well. In the past, there was not a national cutoff date included in those labels. Instead, states applied for FIFRA 24(c) permits if they wanted to impose a cutoff date."

However, according to Rollins, EPA will no longer allow states to use these 24(c) permits to restrict use beyond what's given in the federal label. This applies not only to dicamba but to all pesticides registered under FIFRA.

"Where does this leave our states? According to EPA, they can still regulate use under FIFRA section 24(a), which says states may regulate the use of pesticides so long as they do not violate FIFRA to do so," Rollins said. "However, it's

uncertain what the boundaries of section 24(a) are, especially if states wanted to impose a cutoff date. Right now, it is unclear what the effect of this policy change will be."

#### Glyphosate cases

Lawsuits surrounding Roundup have been going on over the last few years. Currently, Bayer is still in negotiations to try to settle the multiple Roundup-related lawsuits that have been brought to court.

"The federal court concluded in 2020 that glyphosate will not be required to bear Proposition 65 labels, which is a California statute that requires certain products to bear a label warning the consumer that the product may cause cancer," Rollins said.

The state of California tried to list glyphosate under Proposition 65, which would have included Roundup Ready products.

"There have been debates that maybe agricultural products sprayed with glyphosate might need to bear Proposition 65 labels," she said. "The Federal District Court did conclude that requiring those Proposition 65 labels for glyphosate products would be a First Amendment violation."

In January of 2020, the EPA issued an interim registration decision for glyphosate re-approving it for use and reaffirming that EPA does not hold the view that glyphosate causes cancer.

"There are two petitions for review of the decision the EPA issued, which are filed in the Ninth Circuit Court, so that is still ongoing too," she said.

#### Enlist Duo and Chlorpyrifos

Even though the Ninth Circuit vacated the registration for dicamba, it upheld the registration for Enlist Duo.

"In this case on Enlist Duo, the case was challenging the 2016 registration under both FIFRA and the ESA," Rollins said. "There was a lot of overlap in the claims brought for Enlist Duo and dicamba, so it is interesting to see the court rule differently in these two cases."

The court rejected all the FIFRA claims raised, except for the claim that EPA failed to properly assess harm to the Monarch butterfly, which is up for consideration to be listed under the Endangered Species Act.

"The decision on whether the Monarch butterfly is an endangered species is up to the Fish and Wildlife Service who are to make their decision before the end of this year," she said. "However, the court concluded that EPA failed to fully consider under FIFRA whether registering Enlist Duo would have an adverse impact on Monarch butterflies. The court sent the decision back to EPA for further assessment on the impact to Monarchs but kept the registration in place meaning that Enlist Duo will remain registered for use while EPA completes this assessment."

Recently, two cases have been filed in California against Corteva, alleging that exposure to Chlorpyrifos, manufactured by Corteva, has harmed the plaintiff's children. The claims include negligence, failure to warn, and design defects.

"The claims here are similar to some of the claims that were raised in the Bader Farms dicamba case," Rollins said. "In these cases, however, they also brought claims against the city where the plaintiff resides, alleging that the city had failed to provide 'wholesome, potable' drinking water. They are saying that Chlorpyrifos made its way into the city's water supply, which was another way their children were exposed. This too is an ongoing case, which we will most likely be hearing more about in 2021."

#### **Amazon announces ban on toxic chemicals and plastics in food packaging**

Stephanie Stohler, Safer Chemicals, Healthy Families

<https://saferchemicals.org/2020/12/08/amazon-announces-ban-on-toxic-chemicals-and-plastics-in-food-packaging/>

SEATTLE, WA – Today Amazon announced that it will ban certain toxic chemicals and plastics in the food packaging materials used for its Amazon Kitchen brand. Toxic chemicals PFAS (per- and polyfluoroalkyl substances), phthalates, BPA (bisphenol A) and other bisphenols, and the plastics polyvinyl chloride (PVC), polystyrene (PS), and expanded polystyrene (EPS) are now restricted in certain private-label food contact materials. Amazon’s new commitment is the latest update to the chemicals policy it first launched in 2018, which also restricts toxic chemicals in private-label baby, household cleaning, personal care, and beauty products as well as brand-name paint-removal products.

“Amazon’s new policy commitment signals a growing retail sustainability trend,” explains Mind the Store Campaign Director Mike Schade in response to today’s announcement. “In the past year alone, we’ve witnessed more than a half-dozen food retailers from across the country committing to safer alternatives when it comes to food packaging materials. It is clearly possible to do, and yet some major chains like McDonald’s, Kroger, and Costco have not stood up for the health of their customers or the environment.”

“No company should be using chemicals that can impair a person’s immune system, especially as we are battling a worldwide pandemic,” says Executive Director of Toxic-Free Future Laurie Valeriano in response to Amazon’s new RSL released today. “Amazon is wise to be getting in front of regulatory bans that are soon coming their way, like in their home state of Washington. As we continue to fight for critical government policies to protect us against toxic chemicals in food packaging, it’s welcome news to see how companies, like Amazon, are stepping up to do what’s right.”

“Market leaders like Amazon know that children thrive on healthy food that’s free from toxic chemicals that escape from packaging,” says Mike Belliveau, Executive Director of Defend Our Health. “Further reducing the use of chemicals like phthalates and PFAS that may harm brain development could help halt the epidemic of learning and developmental disabilities our children already suffer.”

Amazon’s new restricted substance list (RSL) applies to its Amazon Kitchen brand products sold in Amazon Go, Amazon Go Grocery, Amazon Fresh, and Fresh grocery delivery. It does not apply to other private-label or Amazon brand-name food contact materials. Today’s announcement comes five months after a class-action lawsuit was filed, alleging PFAS was present in Amazon private-label disposable plates, which are not included in this new restriction.

Amazon’s newly released list of restricted chemicals also includes perchlorate, benzophenone, lead, cadmium, mercury, arsenic, and the solvents NMP (N-Methylpyrrolidone), 2-Ethoxyethanol, 2-Methoxyethanol, and toluene. In addition to PVC, PS, and EPS, the company also announced it is prohibiting the following non-recyclable plastics in its food contact packaging: polycarbonates (PC), polyvinylidene chloride (PVDC), rigid polylactic acid (PLA), and polyhydroxyalkanoates (PHAs).

Some state and local governments are moving to phase out classes of toxic chemicals in food packaging, such as PFAS and phthalates, in favor of safer alternatives. Over the past two years, Washington and Maine have enacted phase-outs of PFAS in food packaging that go into effect January 1, 2022 or as soon as safer alternatives are available. Maine’s new law also prohibits the use of phthalates in food packaging and food handling gloves effective January 1, 2022. And, most recently, New York’s Governor signed a bill banning the use of PFAS in food packaging which takes effect at the end of 2022. Federal legislation to ban PFAS in food packaging, the Keep Food Containers Safe from PFAS Act, has been introduced by U.S. Representative Debbie Dingell.

As part of Mind the Store’s research for its annual retailer report, it was found that top food retailers are increasingly adopting safer chemicals policies to reduce and eliminate harmful chemicals. Over the past two years, Ahold Delhaize, Albertsons, Cava, Chipotle, Freshii, Kroger, Panera Bread, Sweetgreen, Trader Joe’s, and Whole Foods Market announced steps to reduce or eliminate certain toxic chemicals in food packaging at over 17,000 stores. A recent report published by the Mind the Store campaign and Toxic-Free Future found major fast-food chains such as McDonald’s, Burger King, and Wendy’s still likely serve up toxic PFAS with some of their most popular takeout foods.

Amazon previously received a grade of C+ in the 2019 “Who’s Minding the Store?” Retailer Report Card.

**New York Ban On PFAS In Food Packaging Is Now Law**

John Gardella, The National Law Review (CMBG3 Law)

<https://www.natlawreview.com/article/new-york-ban-pfas-food-packaging-now-law>

In August 2020, we flagged that New York took a significant step in becoming the third state in the country to ban the use of per- and polyfluoroalkyl substances (PFAS) in food packaging. At the time, the legislation (S.8817 and A.4739-C) was passed by the New York State Legislature, but had not been signed into law by Governor Cuomo. On December 3, 2020, Governor Cuomo took the final step and signed the PFAS food packaging ban into law, joining Maine and Washington in banning the use of PFAS in food packaging. The bill broadly bans the use of all PFAS, a class of over 7,000 chemicals that include PFOA, PFOS, and GenX. This is significant, as the vast majority of PFAS remain unstudied for their potential impact to human health. In addition, the bill prohibits anyone from “distributing, selling, or offering for sale” any food in packaging that contains PFAS. This ban goes into effect in 2023.

Both Washington and Maine have already passed legislation banning the use of PFAS in food packaging. In 2018, Washington amended its own law concerning toxics in packaging, which included a ban on PFAS in food packaging to take effect by January 2022, as long as the Washington Department of Ecology is able to identify a safer alternative in the meantime. Similarly, in June 2019, the Maine Governor signed into law a rule that prohibits the sale of PFAS-containing food packaging that will take effect once the Maine Department of Environmental Protection is able to identify a safer alternative. Unlike the New York just signed by Governor Cuomo, both Maine and Washington have prerequisites of finding safe alternatives to PFAS that must be met before PFAS-containing food packaging is banned.

Several other states have proposed legislation intended to phase-out the use of PFAS in food packaging. We are seeing more proposed legislation as it becomes clearer that the federal government will be slow in regulating PFAS-containing food packaging. Not only are states taking the initiative to phase-out PFAS-containing food packaging, but also major brands such as Sweetgreen, Trader Joe’s, and Whole Foods have taken steps to reduce or eliminate PFAS in light of public concern that food consumption is a prominent source of human exposure.

With the growing concern of PFAS exposure through food packaging, combined with a liberal incoming administration under President-Elect Biden, we anticipate that more states and the federal government will regulate PFAS in food packaging. As is clear from the first three states to regulate PFAS in food packaging, the regulations differ from state to state, so it is necessary to track current and pending legislation to keep in compliance with the laws of every state you do business in.

### **Our View: Review 'forever chemicals' before more mosquito spraying**

The Sun Chronicle

[https://www.thesunchronicle.com/opinion/our-view-review-forever-chemicals-before-more-mosquito-spraying/article\\_a00cb75b-f29c-5b56-9811-c20fa1cc8a43.html](https://www.thesunchronicle.com/opinion/our-view-review-forever-chemicals-before-more-mosquito-spraying/article_a00cb75b-f29c-5b56-9811-c20fa1cc8a43.html)

Mosquitoes are everywhere around here in the summer and fall. That’s especially worrisome when they’re found to carry Eastern Equine Encephalitis, a fairly rare but often deadly illness.

Over the years, many local communities have banned outdoor activities such as youth and high school sports when an outbreak occurs.

That’s why residents in the Attleboro area and their neighbors to the east and south have largely applauded when the state ramps up chemical spraying efforts to rid the region of the insects. In recent years, millions of acres in Southeastern Massachusetts, where EEE is most commonly found, have been treated from the air and ground.

There may be second thoughts now.

According to a new report, the expensive spraying with a pesticide known as Anvil 10+10 has been found to contain an array of toxic compounds called PFAS, short for per- and polyfluorinated alkyl substances.

These so-called “forever chemicals,” which are found in a range of commercial products and never fully degrade, have been linked to cancer, low infant birth weights and a range of diseases, and have long been criticized by environmental advocates.

The amount of some of the chemicals found in the pesticide exceeds recent safety limits imposed by the state for drinking water. Given the amount of pesticide used and how widely it has been dispersed over the years, scientists say it’s likely that the chemicals have leached into ground water and other water sources.

But before you stock up on bottled water, there is reason for hope.

While no federal laws exist on PFAS in our water, most New England states have stepped up to regulate these chemicals. Massachusetts’ new regulations will protect drinking water from six known PFAS.

More importantly, the state has also committed to continue reviewing this class of toxic substances.

There appears to be a lot to learn. For years, the use of PFAS in a variety of compounds, most notably food packaging, has been a subject of controversy among scientists, who are still learning the chemicals’ side effects. Indeed, one study found that PFAS may already be in the bloodstream of 99 percent of Americans, with most feeling no effects.

In the meantime, we urge the state to hold off on any further aerial attacks on mosquitoes until it completes a thorough review of the impact of PFAS on Massachusetts’ water supply, especially here in the southeastern part of the commonwealth. After all, these pests can largely be managed with repellent and long sleeves.

Better to be safe than sorry when it comes to chemicals we don’t yet fully understand.

### **6 Ways the Biden Administration Should Protect Food and Farm Workers From Covid-19**

Jared Hayes, Environmental Working Group

<https://www.ewg.org/news-and-analysis/2020/12/6-ways-biden-administration-should-protect-food-and-farm-workers-covid-19>

The Covid-19 pandemic – worsened by the Trump administration’s woefully anemic response – has taken the lives of more than 300 food and farm workers and sickened tens of thousands more, turning the nation’s food-processing plants and farms into virus hot spots.

Working conditions make food and farm workers especially vulnerable to Covid-19. So what should the incoming administration of President-elect Joe Biden do to protect them? Here are six things the new administration must do quickly.

1. Immediately issue emergency protective standards to require food and farm employers to protect their workers from Covid-19.

Trump has refused to protect workers, instead issuing an executive order to protect employers from liability when their negligence endangers their employees. Some states have acted, but most have not. And now, some legislators are proposing to make food and farm employers immune from liability when they fail to protect their workers.

2. Make sure food and farm workers are first in line for vaccines, once they are approved.

As more and more workers become sick during the current Covid-19 surge, food supply chains could quickly unravel, sending food prices spiking and increasing the number of Americans who struggle with hunger. The Biden administration must recognize that food and farm workers are essential workers.

3. Immediately shut down Trump’s farmer bailout programs and redirect the funds so that they protect food and farm workers.

The tens of billions of dollars meant to relieve the effects of Trump's trade wars have not only flowed disproportionately to the largest and most successful farms but have also largely bypassed the smaller farms that have struggled to keep their workers safe from Covid-19. Biden should instead use emergency funds to provide food and farm workers with personal protective equipment and safe housing and transportation.

4. Ensure that food and farm workers get compensated for the risks they take to feed us.

Rather than provide food and farm workers hazard pay, the Trump administration has actually sought to cut farmworker wages and to strip away what few protections they do have by changing labor rules. The Biden administration should rescind Trump's proposals to cut farmworker wages and instead ensure that food and farm workers receive sick pay when they get sick from Covid-19. Biden has also pledged to support a \$15 minimum wage and measures that will make it easier for workers to organize, including farmworkers.

5. Demand that Congress pass legislation giving undocumented farmworkers and their families the opportunity for permanent resident status and U.S. citizenship.

According to the advocacy group Farmworker Justice, at least half of the nation's roughly 2.4 million farmworkers are undocumented immigrants. Meaningful immigration reform must provide them with protection from deportation and a path to full citizenship. The new administration should also press Congress to fix the programs that bring temporary farmworkers to the U.S.

6. Strengthen the Environmental Protection Agency's Agricultural Worker Protection Standard.

The Trump administration continues to weaken environmental health protections for farmworkers. The Biden administration should make it a priority to protect farmworkers from pesticides. It should immediately ban toxic pesticides like chlorpyrifos, which has been linked to brain damage.

Farm and food workers are working long hours, at enormous personal risk, to feed us. The Biden administration must make every effort to protect these essential workers and recognize the critical contributions they make to our nation. Food and farm workers have always taken care of us – now we must take care of them.

### **AG Becerra Files Amicus Brief Opposing EPA Attempt to Delay Review of Lawsuit Challenging Improper Registration of Toxic Pesticide**

California Attorney General Xavier Becerra, YubaNet.com

<https://yubanet.com/california/ag-becerra-files-amicus-brief-opposing-epa-attempt-to-delay-review-of-lawsuit-challenging-improper-registration-of-toxic-pesticide/>

SACRAMENTO, December 7, 2020 – California Attorney General Xavier Becerra today, leading a multistate coalition, filed an amicus brief opposing the Environmental Protection Agency's (EPA) attempt to delay review of a lawsuit challenging its improper registration process for new uses of sulfoxaflor. Sulfoxaflor is a pesticide that, due to its toxicity, poses risks to pollinators – like bees – that are essential to California's agriculture and ecosystem. In the amicus brief, the coalition argues that the EPA's motion for remand without vacatur would unreasonably and indefinitely delay review of critical Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) claims in this and future cases.

"The Trump Administration's EPA is trying to tie up litigation on its unlawful registration of the toxic pesticide sulfoxaflor indefinitely – while allowing it to remain on the market," said Attorney General Becerra. "Not only that, but the EPA wants to create an escape hatch for future cases where the EPA fails to complete the most basic functions of its job. We urge the court to deny this motion and send a clear message to the EPA that it cannot avoid accountability for its recent unlawful conduct."

Under FIFRA, all pesticides must receive regulatory approval from the EPA before their use. Before registering a pesticide, the EPA reviews human and environmental safety information to determine whether the pesticide will cause

“unreasonable adverse effects on the environment.” Sulfoxaflor was originally registered in 2013, however, a successful court challenge reversed its registration until its manufacturer, Dow Chemical, submitted additional evidence of its effect on pollinators. Studies subsequently showed the pesticide’s toxicity to bees.

Despite this, on July 12, 2019, the EPA suddenly issued pesticide registrations for numerous new uses of sulfoxaflor and removed restrictions on its use and mitigation measures that had previously been in place. The Center for Biological Diversity and the Center for Food Safety filed a lawsuit in the 9th Circuit on August 20, 2019, and Earthjustice filed a lawsuit on behalf of beekeeping organizations shortly thereafter. In September 2020, Attorney General Becerra and a coalition of states filed an amicus brief in support of the challenge.

Attorney General Becerra, leading a similar coalition, today filed an amicus brief challenging the EPA’s motion to remand the case back to the agency so that it can correct its violation of the Endangered Species Act. The EPA, in its motion, acknowledges that it would not be able to begin its review of sulfoxaflor under the Endangered Species Act until June 2025 at the earliest. If granted, the EPA’s motion would blaze a path for the EPA to frustrate FIFRA review of future pesticide registration decisions by allowing the EPA to violate the Endangered Species Act, admit the violation, and move for remand without vacatur, indefinitely delaying review of the FIFRA decision while potentially dangerous and toxic chemicals remain in the marketplace.

In the amicus brief, the coalition argues that the District Court should deny the EPA’s motion to remand because:

- The EPA’s failure to comply with the Endangered Species Act in this instance is part of a broader pattern of registering pesticides without complying with the Endangered Species Act;
- Granting the motion would invite the EPA to circumvent FIFRA review of its future pesticide registration decisions;
- States rely on judicial review of the EPA’s pesticide registration decisions to safeguards states’ resources, public health, economies, and ecosystems; and
- Proceeding to the merits would be the most efficient way to resolve the issues in this case.

Attorney General Becerra is joined by the attorneys general of Hawaii, Maryland, Massachusetts, Minnesota, New Jersey, New York, New Mexico, Oregon, Vermont, and Washington in filing the amicus brief.

A copy of the amicus brief can be found here.

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